



## ***“Huzza! Her sides are made of iron!”***

*Unknown sailor, USS Constitution, 19 August 1812, battle with HMS Guerriere*

### **Building a new Navy for the new United States**

The American Revolution ended in 1783, and the new United States sent its merchant fleet afar to trade in spices, fish, leather, etc. to rebuild its economy. However, *Alliance*, the last Continental Navy warship was sold in 1785 and US merchant vessels thereafter sailed unprotected. This lack of protection became a problem sailing off North Africa in the 1790s and finally Congress authorized a new navy in 1794 to protect the fleet. Between 1797 and 1800, 6 frigates were launched: *United States*, *Constellation*, *Constitution*, *Chesapeake*, *Congress*, and *President*. USS *Constitution*, launched 21 October 1797, is the sole survivor (USS *Constellation* in Baltimore Harbor is the 1854 warship of the same name). Joshua Humphreys designed the frigates to be the strongest, fastest, and most heavily armed warships of the era. *Constitution*'s hull is 3-layers of wood: exterior & interior oak planking and dense live oak framing (ribs) spaced close together as the middle layer. At the waterline, the ship is over 22" thick and this strong and dense hull makes up her "iron" sides. When hit with enemy fire, *Constitution*'s hull either repelled the cannon shot or absorbed them, helping to prevent serious damage or great loss of life. Between 1798 and 1854, *Constitution* was victorious in 33 engagements and her fame rests in her 3 stunning victories over Royal Navy vessels in the War of 1812.

### **Maintaining and restoring an icon**

"Old Ironsides" was able to resist enemy fire in battle, but her oak structure is liable to wood rot. Since her early years, sailing out of Boston to the Mediterranean Sea, around the world in 1844-46, and later as a navy training ship from the 1860s to the 1880s, she has needed periodic repairs and overhauls – some minor, some extensive – to keep her sailing. Each repair not only kept her seaworthy, but also altered her for continued use. In time, her gun battery was up-graded, improvements were made to her sailing rig, she became a sailing classroom, and finally, with a large "barn" installed, she was a receiving ship with barracks and offices. USS *Constitution* returned to Boston for her 100<sup>th</sup> birthday in 1897, and the Charlestown Navy Yard has been her home ever since. In the 20<sup>th</sup> century, the ship underwent several restorations: in 1906-07, the "barn" was removed and she was cosmetically restored to a sailing warship, and in 1927-31, ~85% of the ship was "renewed" (i.e. replaced) to make her structurally sound. To thank the school children who contributed to a "pennies campaign" in 1925 and the donors of materials during the Great Depression, *Constitution* was towed to the 3 US coasts, visiting 76 ports and hosting over 4.6 million visitors from 1931-34. The 1992-96 restoration brought back the ship's structural strength according to Joshua Humphreys' original 1794 instructions for building the frigates. The work of that 4-year restoration enabled *Constitution* to mark her 200<sup>th</sup> year anniversary by sailing under her own power for the first time in 116 years on July 21, 1997, off the coast of Marblehead, Massachusetts.

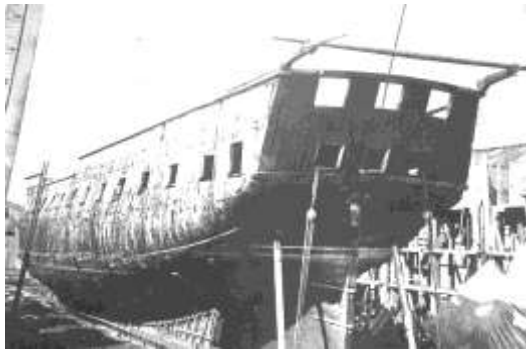
### **2007-2010 Restoration and the Anniversary of the War of 1812**

The most recent restoration on *Constitution* began in late 2007. Regularly scheduled maintenance of the rigging and spars was conducted, but the restoration also included: re-establishing the camber (curve) in the spar (upper) deck, lowering the bulwarks (upper sides), and opening the waist (midships area of the bulwarks) of the ship, per her 1812 configuration. The work was conducted in the Charlestown Navy Yard by the Naval History & Heritage Command Detachment Boston whose mission is to perform all restorations of *Constitution* and, as far as practicable return her to her 1812 configuration.

The restoration was completed November, 2010 and USS *Constitution* is now ready to mark the anniversary of the War of 1812 with her hull the closest it's been to its 1812 appearance in over 80 years.



Earliest known painting of *Constitution*, c.1803, Michele Felice Corne    Navy Art Collection



USS *Constitution*, c. 1875, showing live oak framing    US Navy Photo



Removing sections of *Constitution*'s waist bulwarks, 2010 (left); re-opened waist reflecting War of 1812 spar deck configuration, 2011.    Courtesy, Naval History & Heritage Command Detachment Boston.

## USS *Constitution* Facts

USS *Constitution* was launched October 21, 1797 in Boston and first sailed on July 22, 1798 as one of the six frigates that began the new United States Navy. *Constitution* became “America’s Ship of State” in October, 2009 and is the oldest commissioned warship afloat in the world.

*Constitution* is remembered for her 33-0 engagement record including her three War of 1812 victories against the Royal Navy. Her first War of 1812 battle occurred on August 19<sup>th</sup> against HMS *Guerriere*. The defeat of *Guerriere* was the first frigate-to-frigate victory of the U.S. Navy over the Royal Navy (then the largest navy in the world). *Constitution* became “Old Ironsides” when an American sailor noticed that some of *Guerriere*’s shot failed to penetrate *Constitution*’s thick oak hull. “Huzza! Her sides are made of iron!”, the sailor purportedly exclaimed, and thus the nickname was born.

Statistics for USS *Constitution*:

**Displacement:** 1900+ ton

**Length:** 207’ (billethead to taffrail)

**Beam:** 43’ 6”

**Draft:** 22’ 6”

**Mainmast Height:** 210’

**Sail Area:** 45+ Sails = Over 1 acre of canvas

**Speed** (top): 13+ knots (~15 mph)

**Armament (1812):** Spar Deck: 24, 32-pound carronades, crew 4-8, range ~400 yards      1, 18-pound bow chaser

Gun Deck: 30, 24-pound long guns, crew 7-14, range ~1200 yards

**Crew (1812):** 450-500

**Crew today:** 65-70 active-duty U.S. Navy women and men

For more information, please visit: [www.history.navy.mil/ussconstitution](http://www.history.navy.mil/ussconstitution)